

[0031] The position detector may include: a plurality of magnetic field generators which are each provided at predetermined positions within one of the first and second units; a plurality of magnetic field detectors which are each provided at predetermined positions within the other of the first and second units, corresponding to the magnetic field generators; and a position determining section for determining a position of the first unit based on a detection signal of the magnetic field detector, wherein the detection signal varies depending on a positional relationship between the first unit and the second unit.

[0032] The foldable portable information terminal may further include a display controller controlling the display section of an approximately rectangular shape such that a displaying mode of the display section is changed depending on a positional relationship between the first unit and the second unit.

[0033] The display controller may change a direction of displayed contents on the display section so that the direction of the displayed contents matches a longitudinal direction of the second unit independently of a longitudinal direction of the display section which is one of a parallel direction and an orthogonal direction with respect to the longitudinal direction of the second unit.

[0034] The display controller may change a direction of displayed contents on the display section so that the direction of the displayed contents matches a position of the second unit in a state that the first unit and the second unit are closed with the display section facing out.

[0035] The first unit may have a second operation section which faces out when the first unit and the second unit are closed with the display section facing out so that the second operation section be used to perform a menu operation, an image operation, and a call arrival operation while visually confirming displayed contents on the display section.

[0036] The second operation section may be a touch panel provided on the display surface of the display section. The foldable portable information terminal may further include a touch panel function controller for changing a touch panel function enabled area of the touch panel on the display surface depending on a positional relationship between the first unit and the second unit.

[0037] The second operation section may include at least one operation button provided on a side surface of the first unit.

[0038] In the foldable portable information terminal, a directional operation performed by using the operation section may be changed depending on a positional relationship between the first unit and the second unit. A direction instructed by a direction indication key of the operation section may be changed depending on a positional relationship between the first unit and the second unit, which is one of an open state, a rotated state, and a closed state with the display section facing out.

[0039] The display section may be stopped displaying and/or backlighting in a state that the first unit and the second unit are closed with the display section facing in.

[0040] The foldable portable information terminal may further include: an alert device for generating an alert for at least a call arrival by using at least one of sound, vibration,

light, and the display section; and an alert controller controlling the alert device such that, when the position detector detects that the first unit and the second unit are shifted to a normal conversation position in a state that the alert device is alerting for the call arrival, the alert controller stops the alert device alerting.

[0041] The foldable portable information terminal may further include a call arrival and termination controller controlling such that the foldable portable information terminal is made off-hook when the position detector detects that the first unit and the second unit are shifted to a normal conversation position at an occurrence of an incoming call, and on-hook when the position detector detects that the first unit and the second unit are shifted from the normal conversation position to another position after the call has been terminated.

[0042] As described above, the foldable portable information terminal can be folded and freely rotated with respect to a longitudinal direction of the second unit, so that it can be folded with the display section facing out. Therefore, without opening the terminal, the user can read a mail, look at a map or other image, or confirm a calling party on the display. Consequently, the user can immediately carry out the operation of receiving a call after judging the display contents in the closed state. When the terminal is folded with the display section facing out, it is possible to carry it in compact while looking at a map or the like on the screen, resulting in improved ease of use.

[0043] Since the first unit having the display section can be rotated in a display plane direction, it is possible to suitably display the contents of both vertically and horizontally orientations without increasing in size, that is, the same size as a conventional portable telephone.

[0044] A structure in which the connecting member occupies only at the center or in the vicinity of the center on the end section of the terminal increases the degree of freedom in designing, allowing the design of an unprecedented shape.

BRIEF DESCRIPTION OF THE DRAWINGS

[0045] FIG. 1 is a perspective view showing a typical example of a conventional portable telephone having a foldable structure;

[0046] FIG. 2A is a perspective view of another conventional portable telephone in an opened state;

[0047] FIG. 2B is a perspective view of the conventional portable telephone in a usual folded state;

[0048] FIG. 2C is a perspective view of the conventional portable telephone in a reverse folded state;

[0049] FIG. 3A is a perspective view of another conventional portable telephone in an opened state;

[0050] FIG. 3B is a top plan view of the conventional portable telephone in a closed posture;

[0051] FIG. 3C is a top plan view of the conventional portable telephone in an inversely closed posture;

[0052] FIG. 4A is a plan view of a portable telephone according to an embodiment of the present invention in a state that an upper unit is extended to a horizontal direction by facing the display surface outward;